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Amendments To the Claims:

Please amend the claims as shown. Applicants reserve the right to pursue any canceled claims at a later date.

1.-32. (cancelled)

33. (currently amended) A method for programming an industrial controller, the method comprising the steps of:

a) creating a flowchart, including a plurality of commands with the use of a graphical editor;

b) generating a textual language based on the flowchart;

c) converting such textual language into a processor-independent pseudo-code;

d) loading the processor-independent pseudo-code into the controller; and

e) converting the processor-independent pseudo-code into an executable processor code, whereby such commands may be executed,

wherein programming language commands are made available to the user in the graphical editor, and wherein the programming language commands are adapted to given hardware specifications.

34. (currently amended) The method according to claim ~~33~~ 65, wherein the graphical elements comprising function interfaces of corresponding subprograms are generated in flowchart notation from user-defined subprograms of the ~~structured~~ textual language.

35. (currently amended) The method according to claim ~~33~~ 65, wherein the graphical elements comprise language elements for forming the ~~motion control~~ flowchart.

36. (previously added) The method according to claim 33, wherein the textual language comprises structured text according to IEC 6-1131.

37. (previously added) The method according to claim 36, wherein a user can switch between structured textual language, contact plan and function plan as forms of representation for formulating conditions.

38. (currently amended) The method according to claim 33, wherein the ~~motion control~~ flowchart notation comprises at least one of the group consisting of loop and parallel branch language elements.

39. (previously added) The method according to claim 38, wherein the controller executes interpolation cycles and individual commands are initiated in a given interpolator cycle within a respective parallel branch.

40. (currently amended) The method according to claim ~~33~~ 65, wherein parameters for the function blocks are set via a mask input.

41. (currently amended) The method according to claim ~~33~~ 65, wherein function blocks are combined into modules that are represented as function blocks in ~~motion control~~ flowchart notation.

42. (currently amended) The method according to claim ~~42~~ 41, wherein interleaved modules are provided in ~~motion control~~ flowchart notation.

43. (currently amended) The method according to claim ~~33~~ 65, wherein a plurality of variable assignments are supported for variables in the function blocks represented in flowchart notation.

44. (currently amended) The method according to claim ~~33~~ 65, wherein function blocks representing functions requiring a given period of time comprise step-enabling conditions in ~~motion control~~ flowchart notation.

45. (currently amended) The method according to claim ~~33~~ 65, wherein graphical elements of the flowchart are automatically positioned.

46. (currently amended) The method according to claim ~~33~~ 65, wherein graphical elements of the flowchart are automatically linked together.

47. (previously added) The method according to claim 33, wherein the flowchart is adopted to be displayed in a form selected from the group consisting of an enlarged form and a reduced form .

48. (previously added) The method according to claim 33, wherein the textual language comprises notation facilitating its re-transaction to flowchart notation.

49. (currently amended) A device for programming an industrial control system, ~~in particular motion controllers,~~ wherein control structures and function blocks are linkable by a user by via a graphical editor to form a motion control flowchart that can be visualized on a display device, the device comprising ~~the following successive steps~~:

a) means for generating a textual language from the flowchart;

b) means for compiling the textual language in a processor-independent pseudo-code;

c) means for loading the processor-independent pseudo-code into the controller; and

d) means for converting the processor-independent pseudo-code into executable processor code;, wherein

programming language commands are made available to the user in the graphical editor, and wherein the programming language commands are adapted to to given hardware specifications ~~programming language commands are provided in the flowchart editor as a function of the configuration of at least an aspect of the control system~~.

50. (currently amended) The device according to claim 49, wherein appropriate graphical elements comprising function interfaces of respective subprograms are generated in motion control flowchart notation based on user-defined subprograms in ~~structured~~ textual language.

51. (previously added) The device according to claim 49, wherein automatically generated graphical elements are provided as language elements of the motion control flowchart.

52. (previously added) The device according to claim 49, wherein the textual language comprises IEC 6-1131 textual language.

53. (previously added) The device according to claim 52, wherein a user may switch between structured textual language, contact plan and function plan as forms of representation in formulating conditions.

54. (currently amended) The device according to claim 50, wherein the ~~language~~ graphical elements in motion control flowchart notation comprise at least one of the group consisting of a loop and a parallel branch.

55. (currently amended) The device ~~for~~ according to claim 54, wherein the controller executes interpolation cycles and individual commands are initiated in a given interpolator cycle within the respective parallel branch.

56. (previously added) The device for programming according to claim 50, wherein parameters for function blocks are set via mask input..

57. (previously added) The device according to claim 50, wherein a plurality of function blocks are combined into a module that is represented as a function block in motion control flowchart notation.

58. (previously added) The device according to claim 57, wherein interleaved modules are provided in motion control flowchart notation.

59. (previously added) The device for programming according to claim 50, wherein a plurality of variable assignments is supported for variables in the function blocks represented in flowchart notation.

60. (previously added) The device according to claim 50, wherein step-enabling conditions are provided in motion control flowchart notation for function blocks representing functions requiring a period of time.

61. (previously added) The device according to claim 50, wherein graphic elements of the motion control flowchart are adapted to be automatically positioned .

62. (previously added) The device according to claim 50, wherein graphic elements of the motion control flowchart are adapted to be automatically linked together .

63. (currently amended) The device for programming according to claim 50, wherein the motion control flowchart is adapted to be presented on the display in a form comprising one of the group consisting of an enlarged form and a reduced form visualized in a reduced or an enlarged form in the display.

64. (previously added) The device for programming according to claim 50, wherein the textual language comprising notation facilitating its re-translation to flowchart notation.

65. (new) The method according to claim 33, wherein the programming language commands comprise function blocks and graphical elements.

66. (new) The method according to claim 33, wherein the textual language comprises a structured textual language.

67. (new) The device for programming according to claim 49, wherein the industrial control system comprises a motion controller.

68. (new) A method for programming an industrial controller, the method comprising the steps of:

a) creating a flowchart, including a plurality of commands with the use of a graphical editor;

b) generating a textual language based on the flowchart;

c) converting such textual language into a processor-independent pseudo-code;

d) loading the processor-independent pseudo-code into the controller; and

e) converting the processor-independent pseudo-code into an executable processor code, whereby such commands may be executed, wherein

the flowchart notation comprises at least one of the group consisting of loop and parallel branch language elements, and wherein

the controller executes interpolation cycles and individual commands are initiated in a given interpolator cycle within a respective parallel branch.

69. (new) A device for programming an industrial control system, wherein control structures and function blocks are linkable by a user by via a graphical editor to form a motion control flowchart that can be visualized on a display device, the device comprising:

a) means for generating a textual language from the flowchart;

b) means for compiling the textual language in a processor-independent pseudo-code;

c) means for loading the processor-independent pseudo-code into the controller; and

d) means for converting the processor-independent pseudo-code into executable processor code, wherein

programming language commands are provided in the editor as a function of the configuration of at least an aspect of the control system, wherein

graphical elements comprising function interfaces of respective subprograms are generated in motion control flowchart notation based on user-defined subprograms in textual language, wherein

the graphical elements in motion control flowchart notation comprise at least one of the group consisting of a loop and a parallel branch, and wherein

the controller executes interpolation cycles and individual commands are initiated in a given interpolator cycle within the respective parallel branch.

70. (new) A device for programming an industrial control system, comprising:

a) a mechanism for generating a textual language from the flowchart;

b) a mechanism for compiling the textual language in a processor-independent pseudo-code;

c) a mechanism for loading the processor-independent pseudo-code into the controller; and

d) a mechanism for converting the processor-independent pseudo-code into executable processor code, wherein

the language commands in flowchart notation comprise at least one of the group consisting of a loop and a parallel branch, and wherein

the controller executes interpolation cycles and individual commands are initiated in a given interpolator cycle within the respective parallel branch.